

JUL 06 2004

O I P E
JULY 2004
PATENT & TRADEMARK OFFICE

1/39

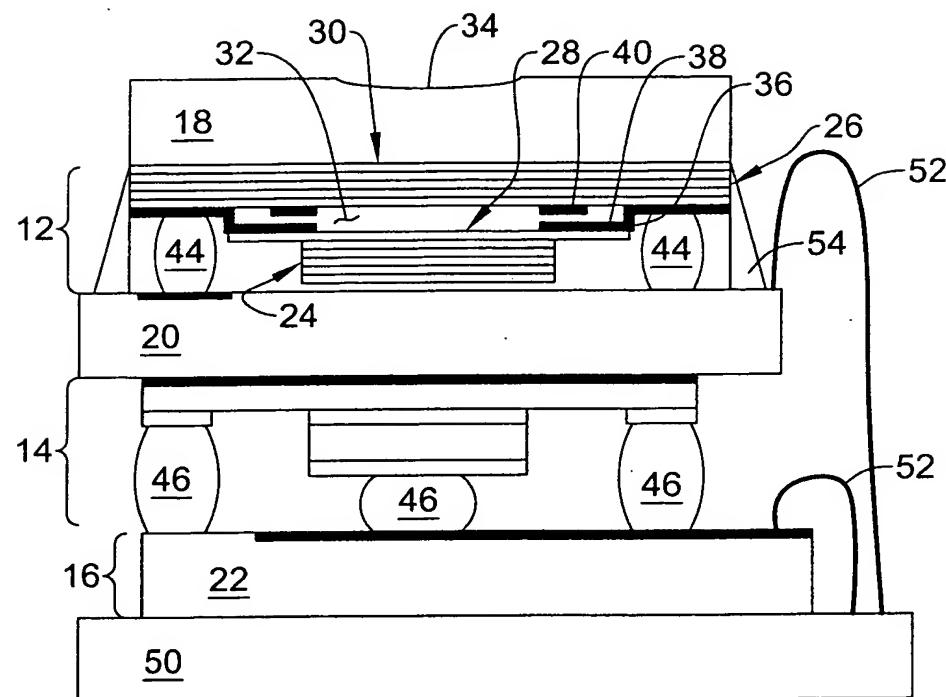


Figure 1

2/34

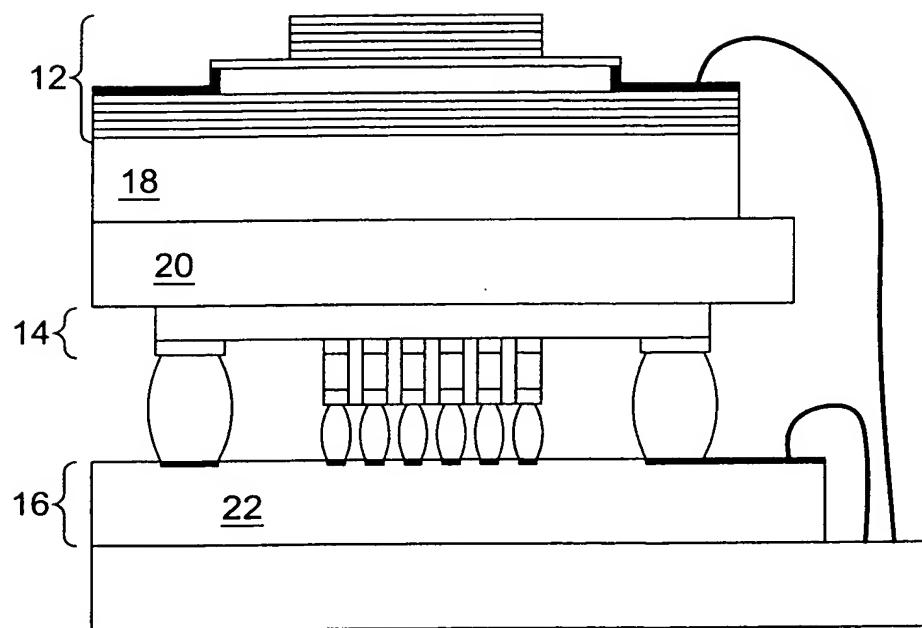


Figure 2

3/39

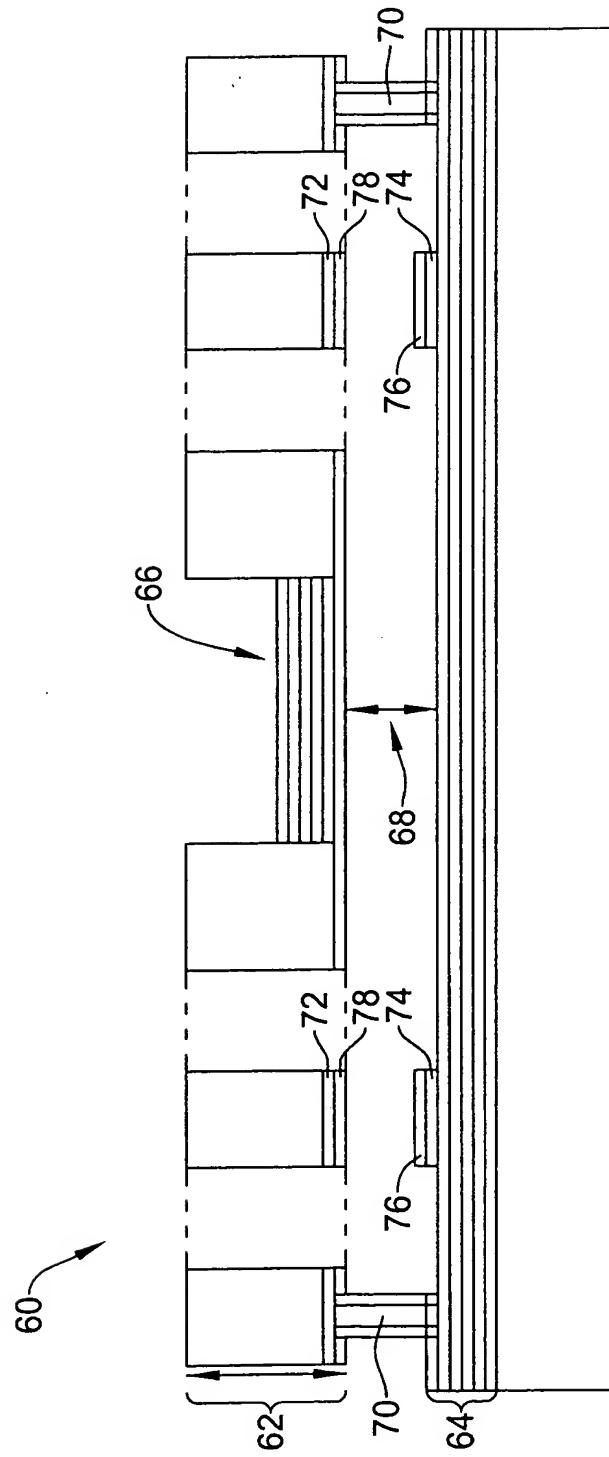


Figure 3

4/39

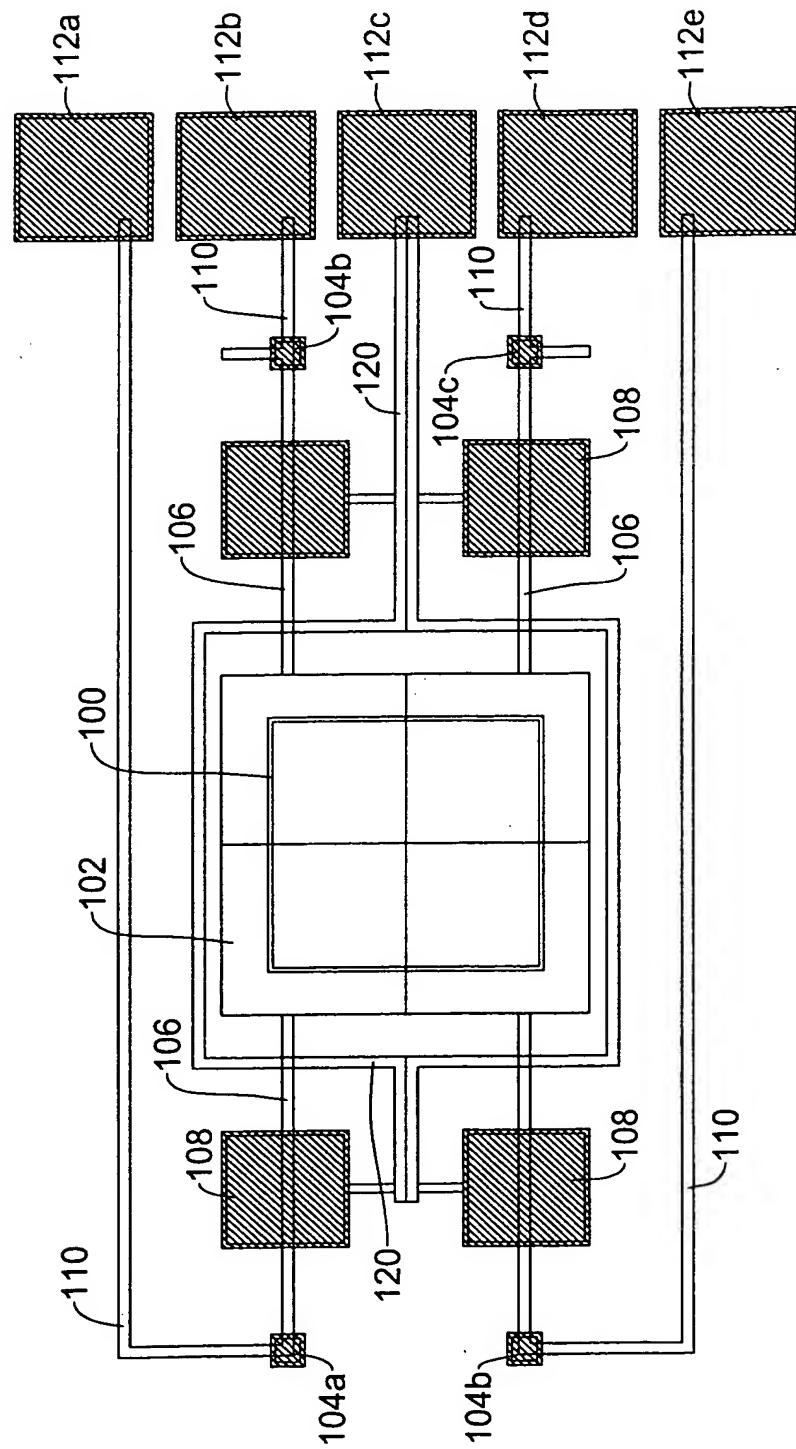


Figure 4

5/39

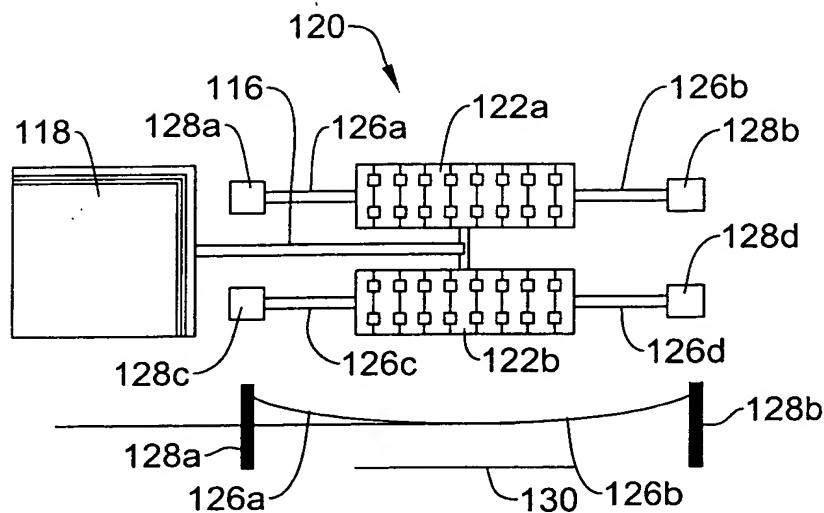


Figure 5

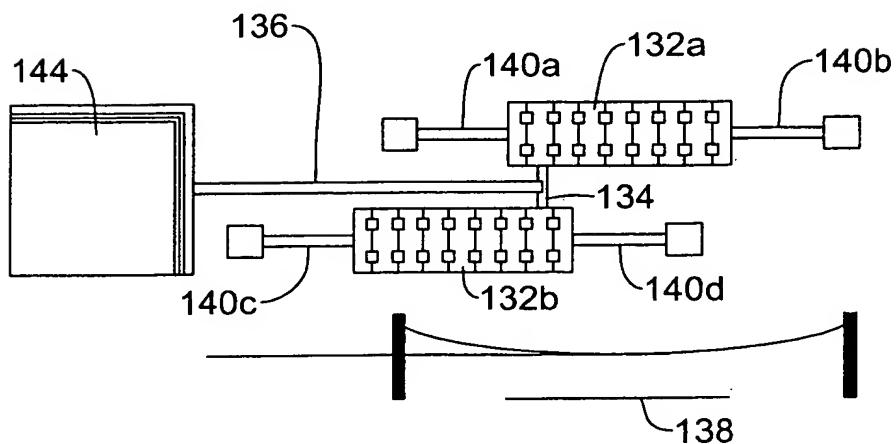


Figure 6

6/39

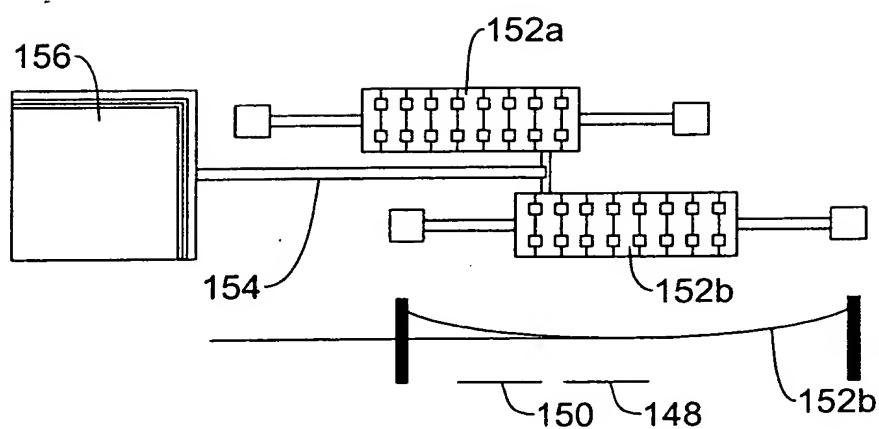


Figure 7

7/39

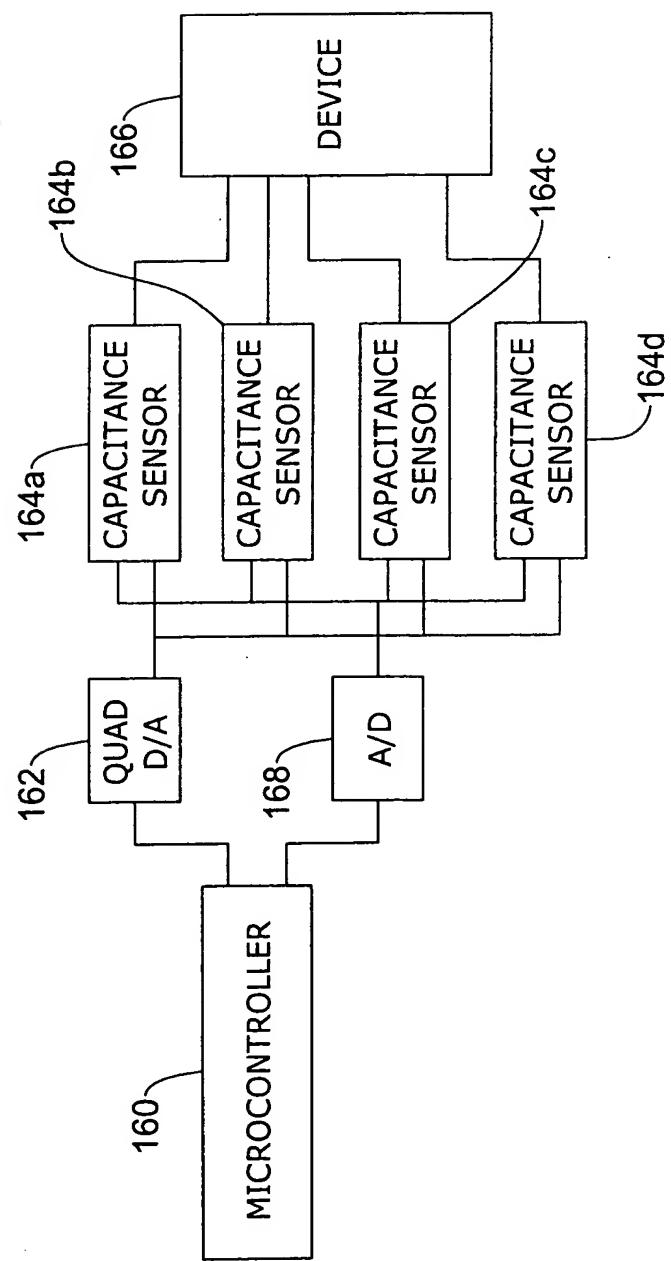


Figure 8

8/39

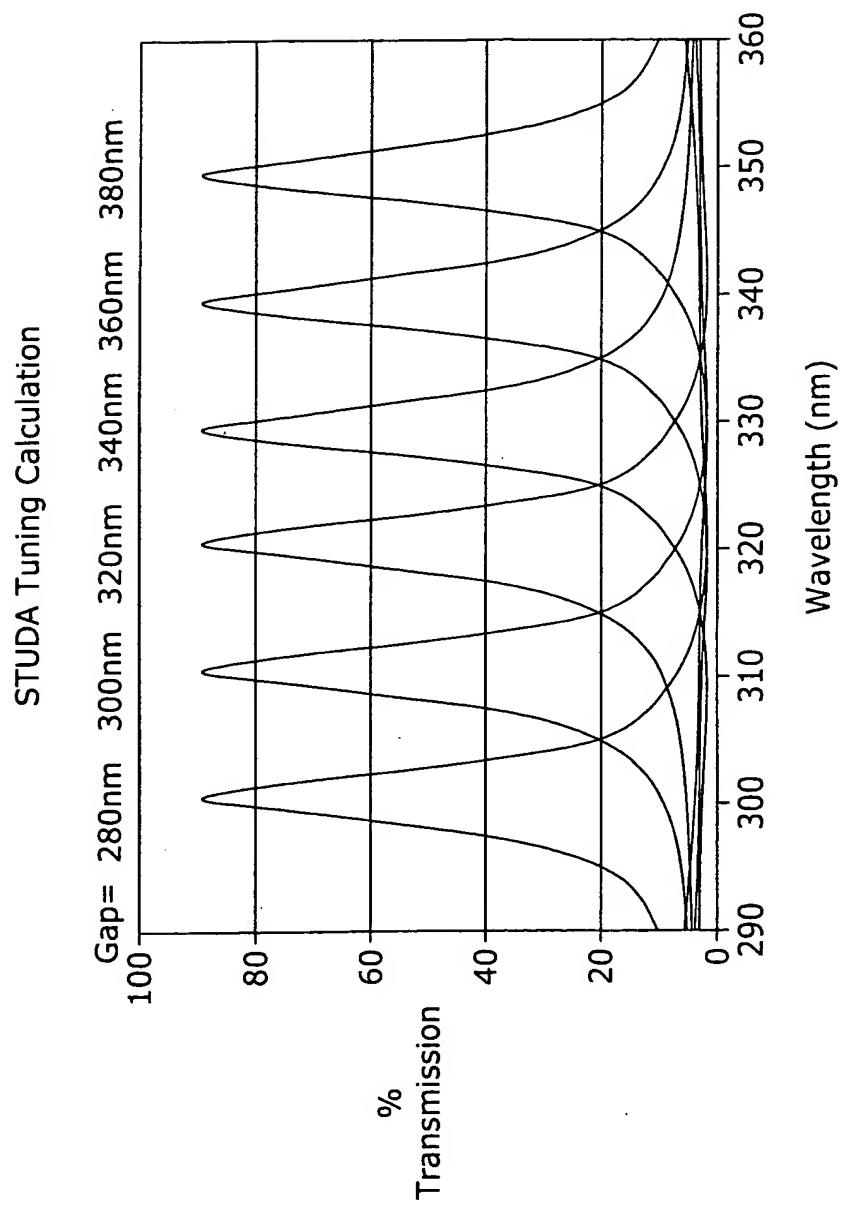


Figure 9

9/39

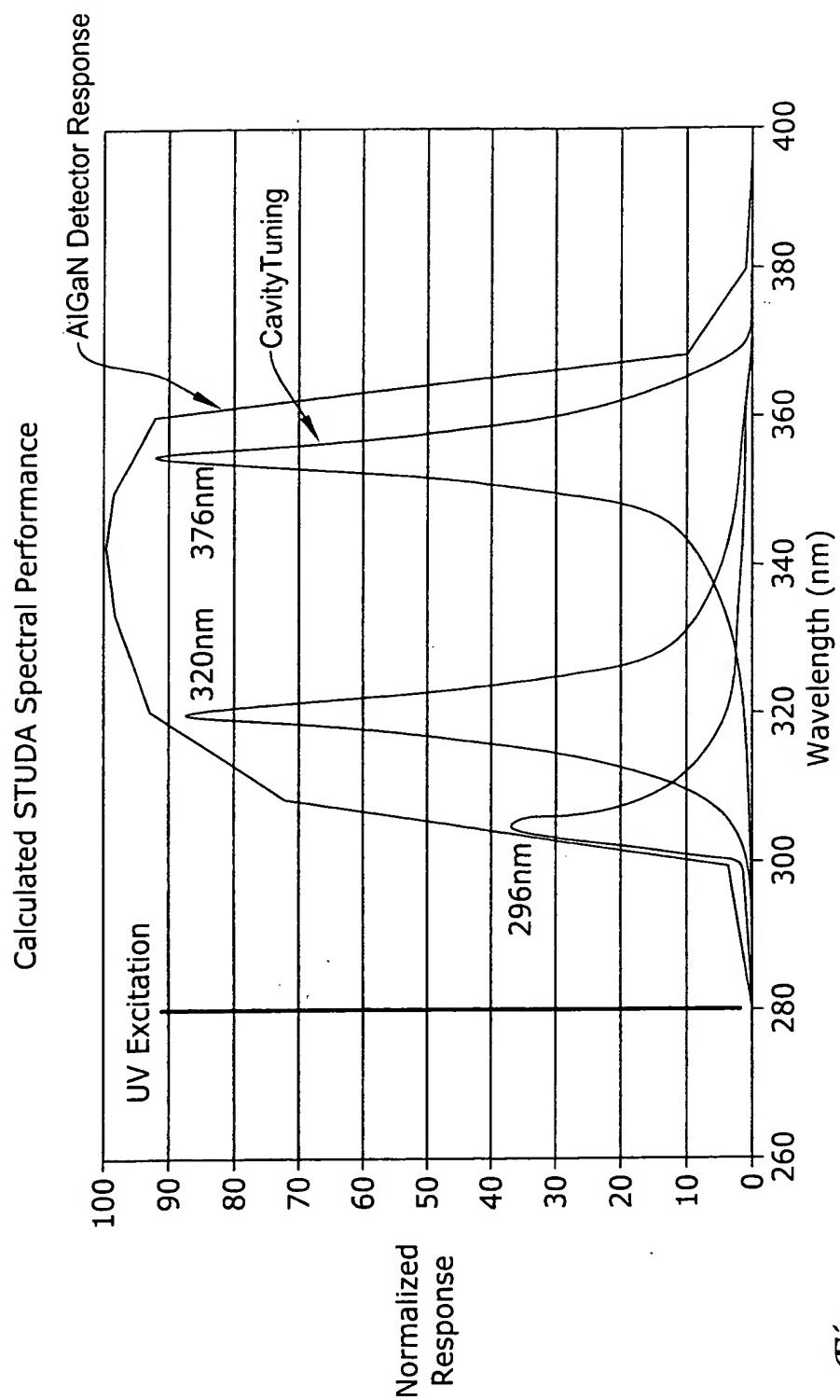


Figure 10

10/39

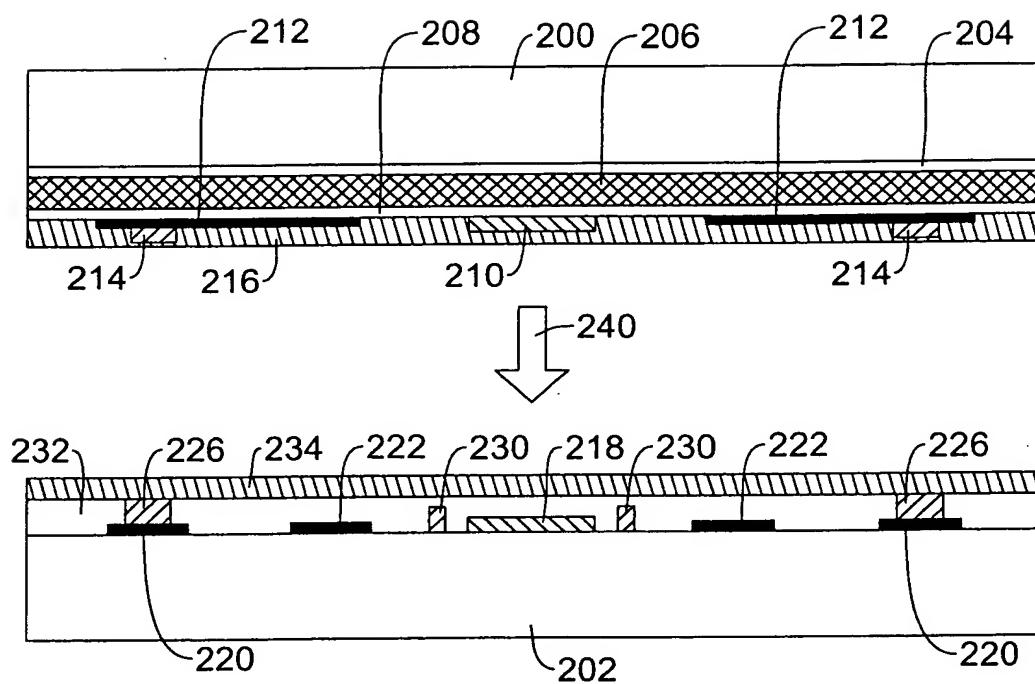


Figure 11A

11/39

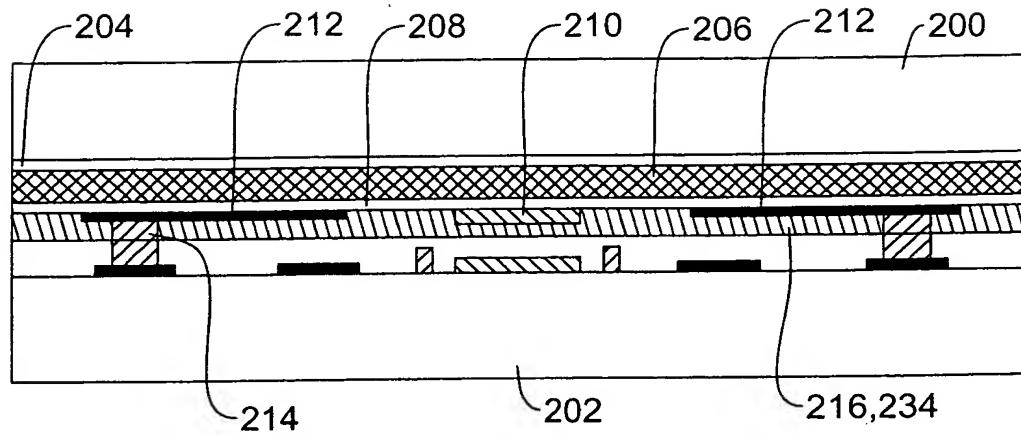


Figure 11B

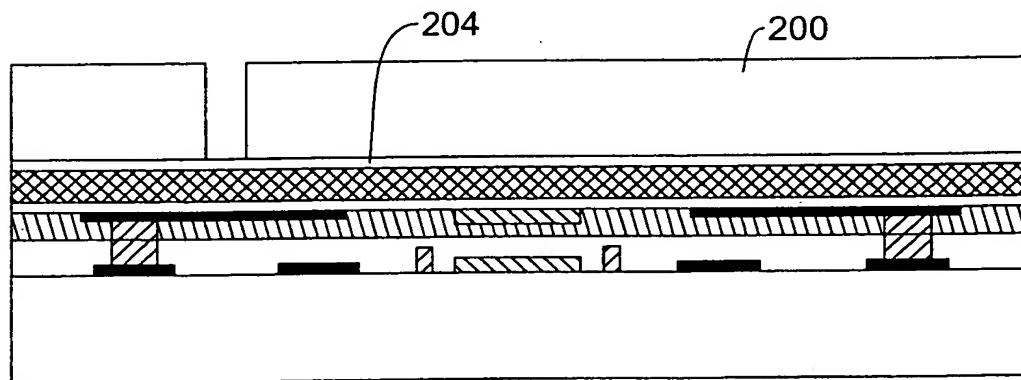


Figure 11C

12/39

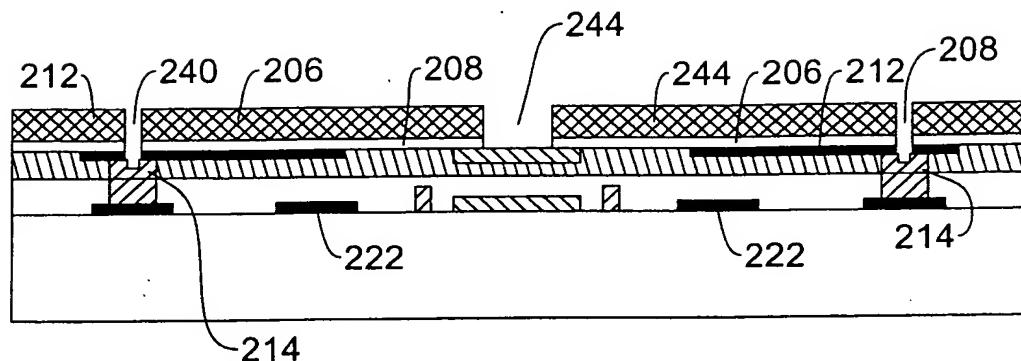


Figure 11D

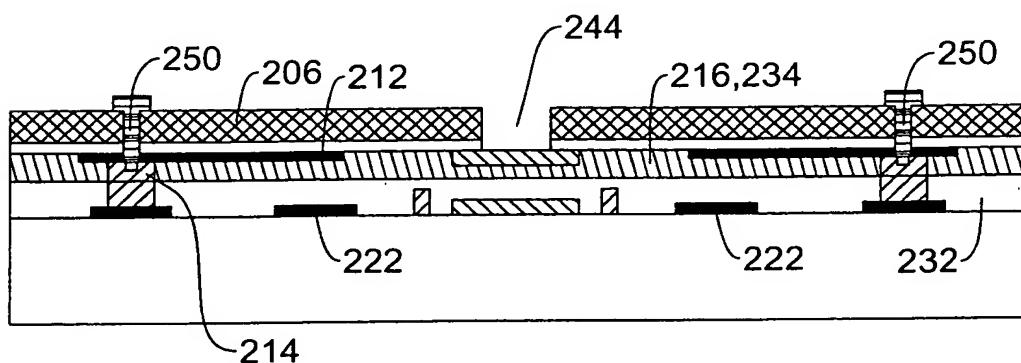


Figure 11E

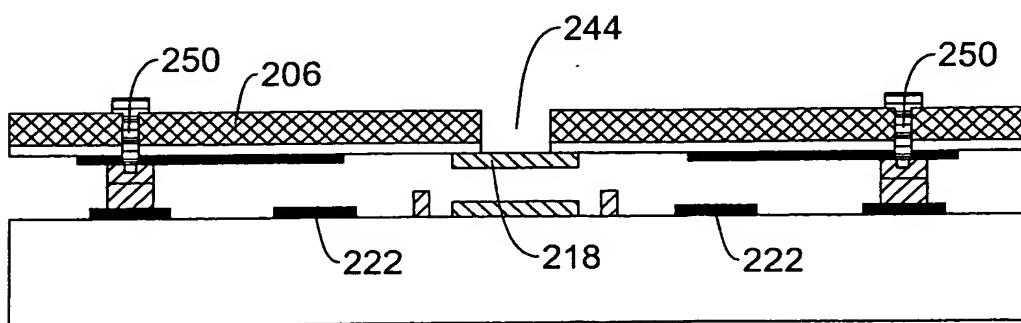


Figure 11F

13/39

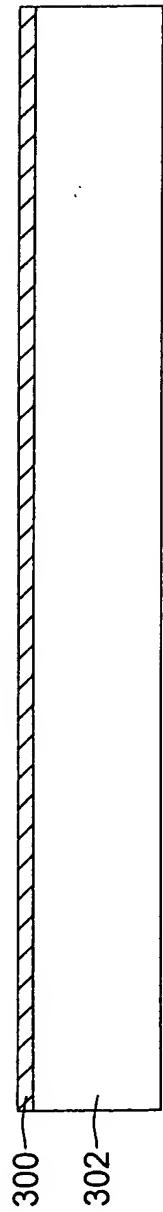


Figure 12A

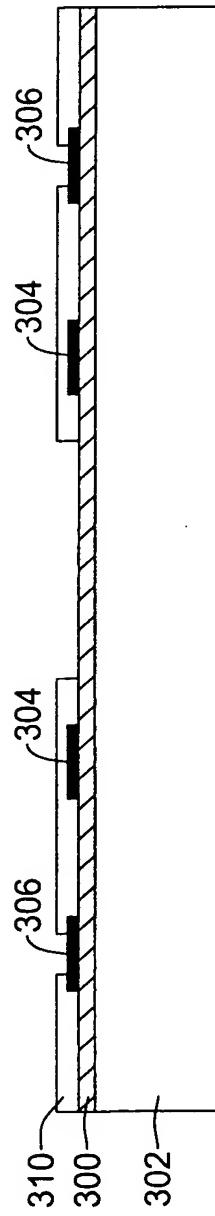


Figure 12B

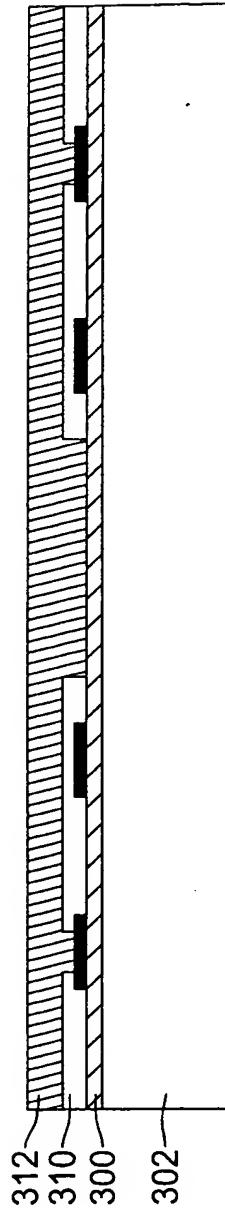


Figure 12C

14/39

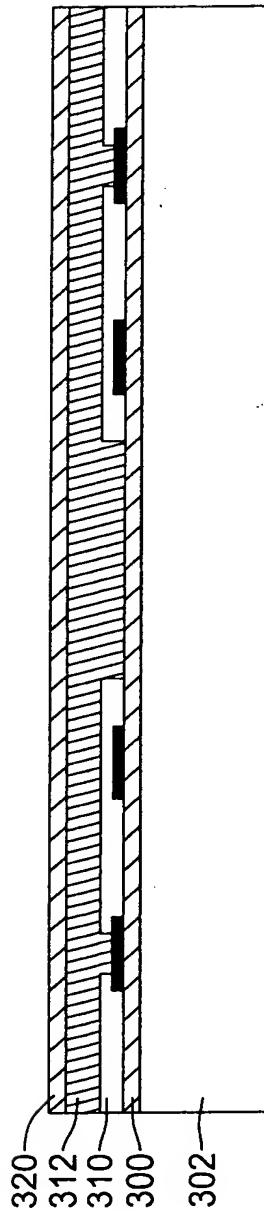


Figure 12D

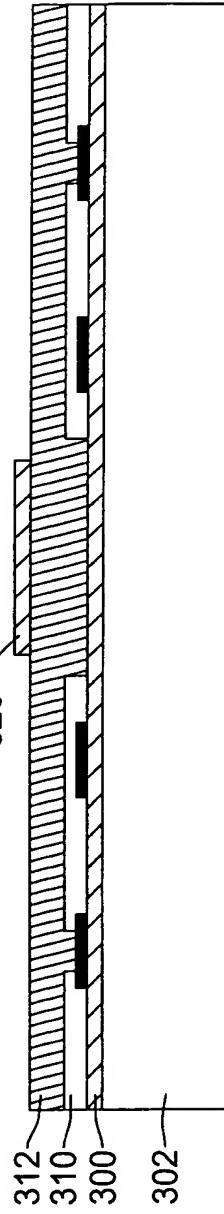


Figure 12E

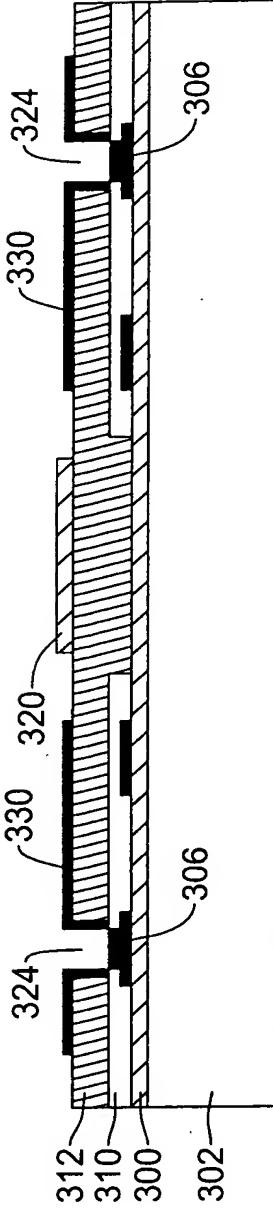


Figure 12F

15/39

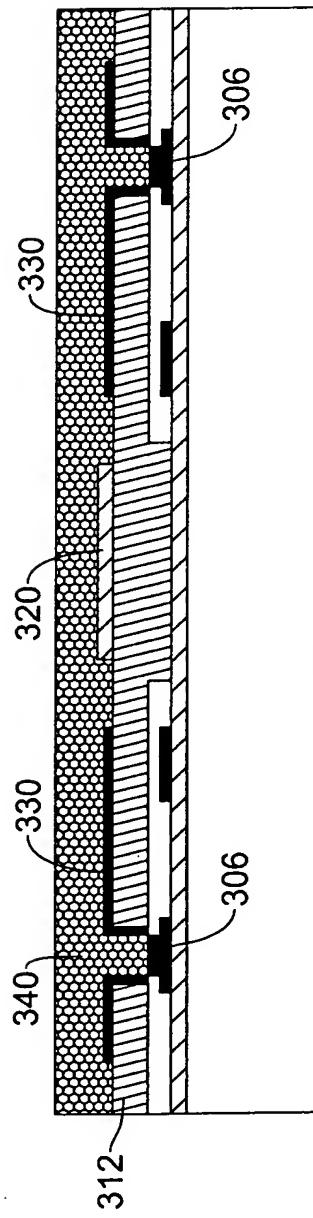


Figure 12G

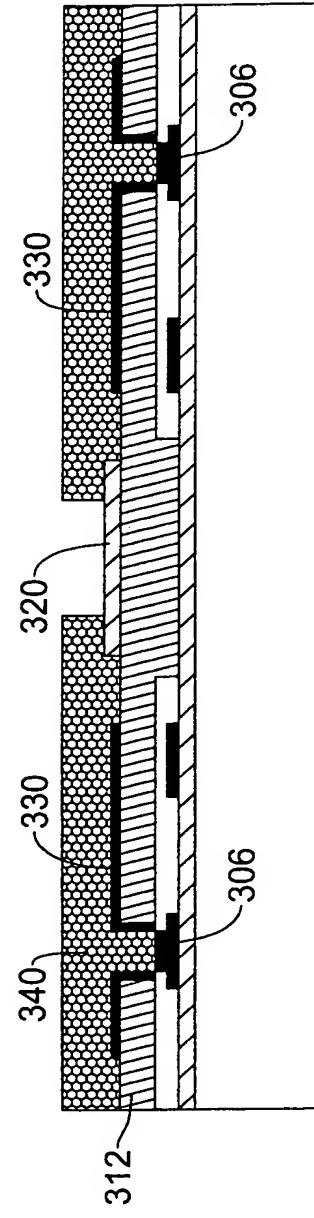


Figure 12H

16/39

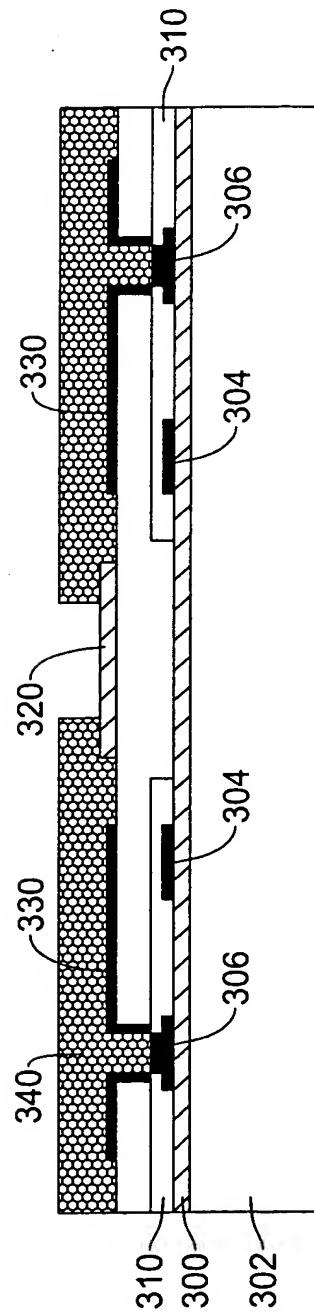


Figure 12I

17/39

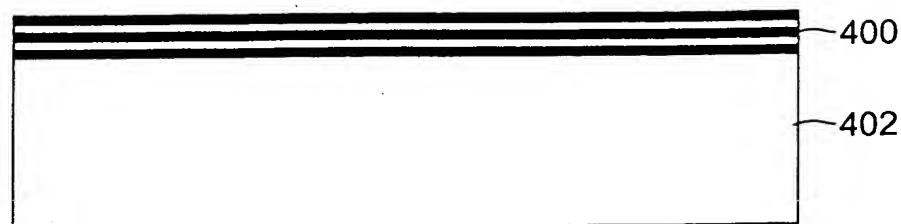


Figure 13A

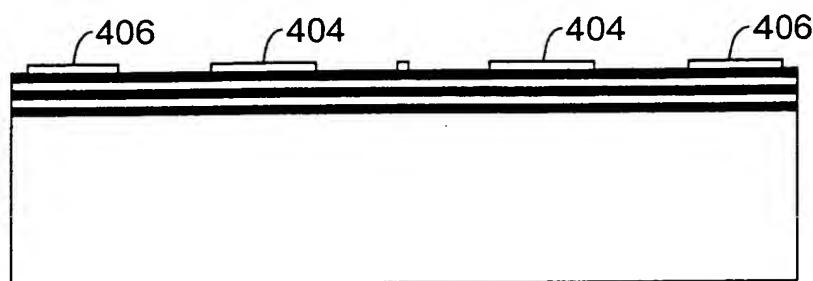


Figure 13B

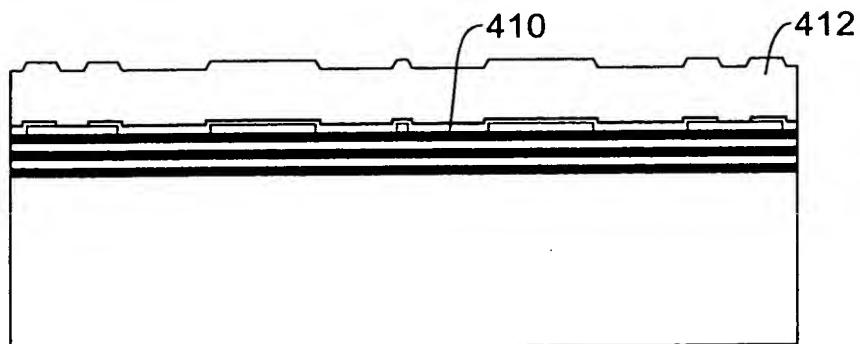


Figure 13C

18/39

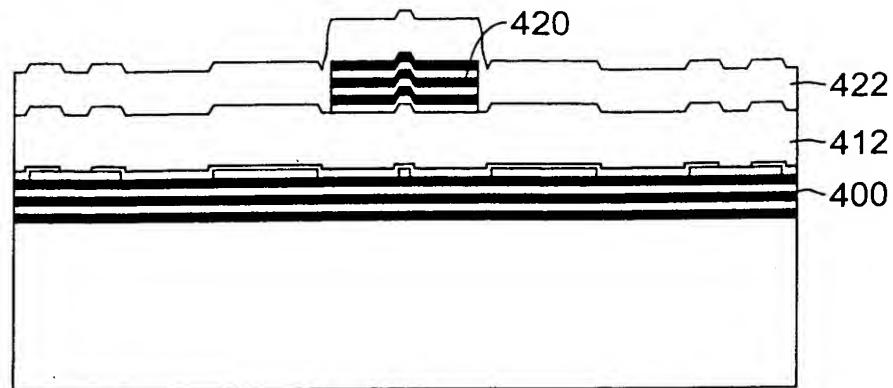


Figure 13D

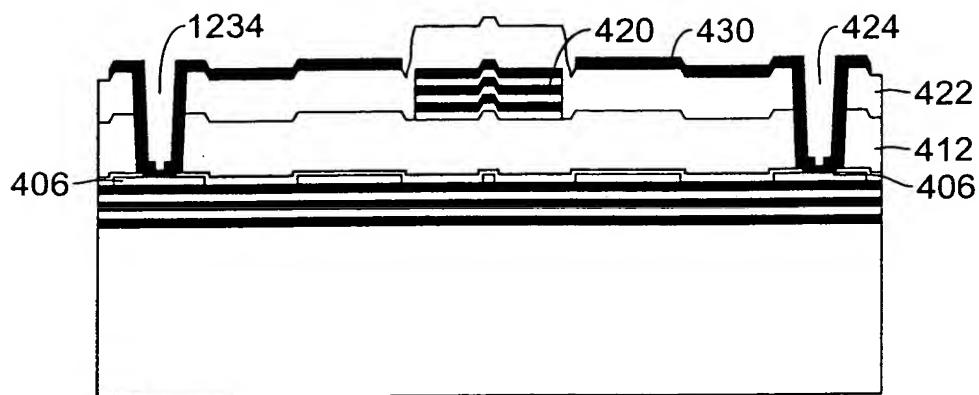


Figure 13E

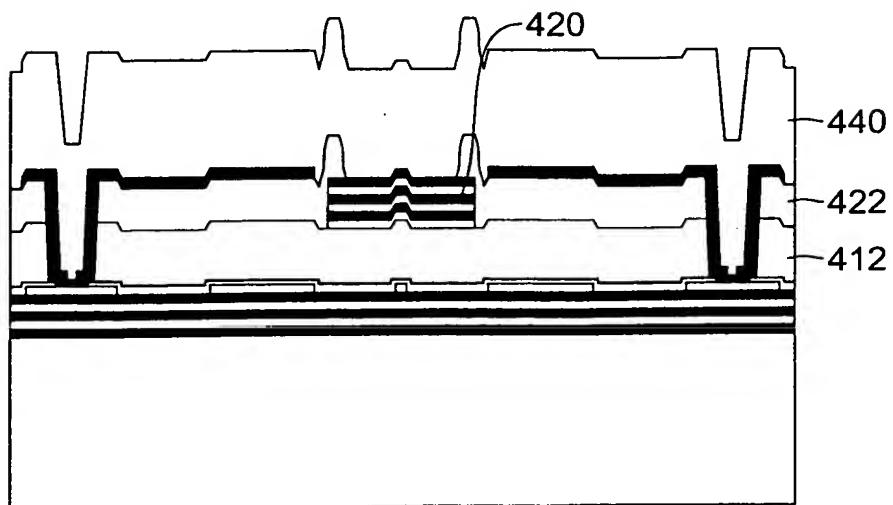


Figure 13F

19/39

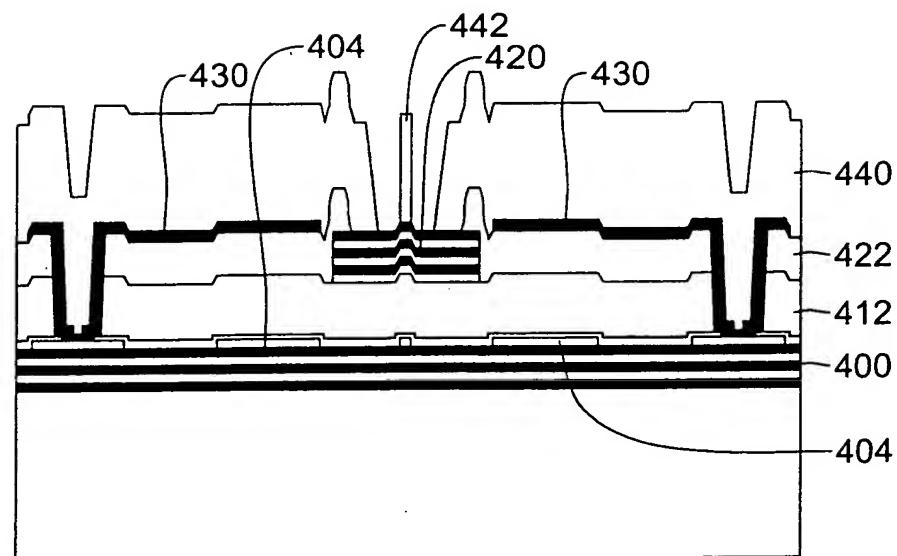


Figure 13G

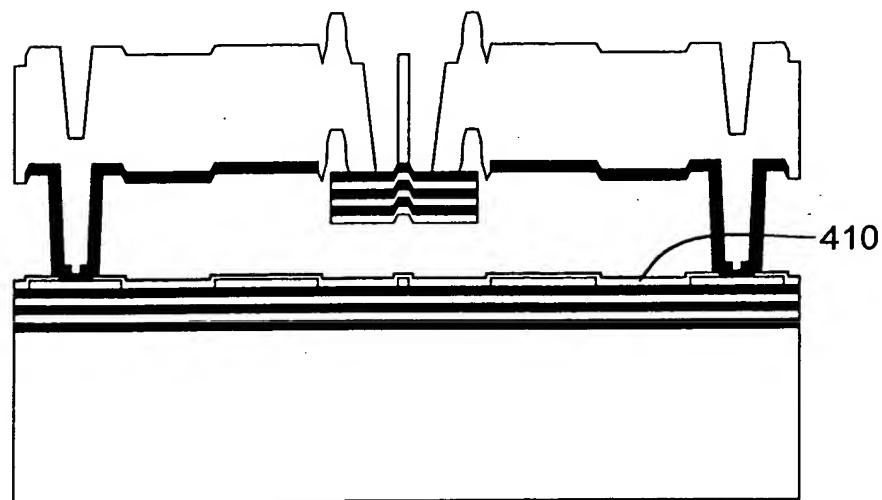


Figure 13H

20/39



Figure 14A

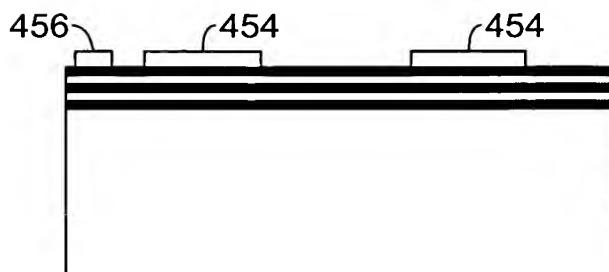


Figure 14B

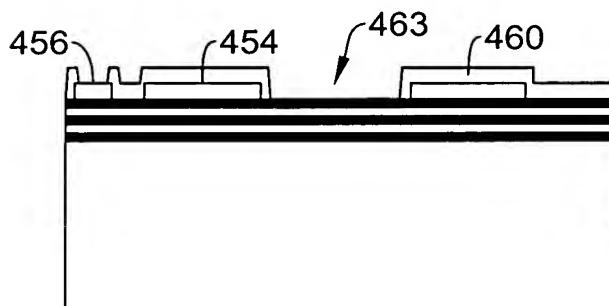


Figure 14C

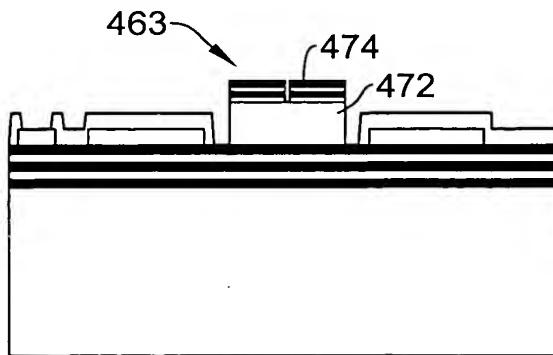


Figure 14D

21/39

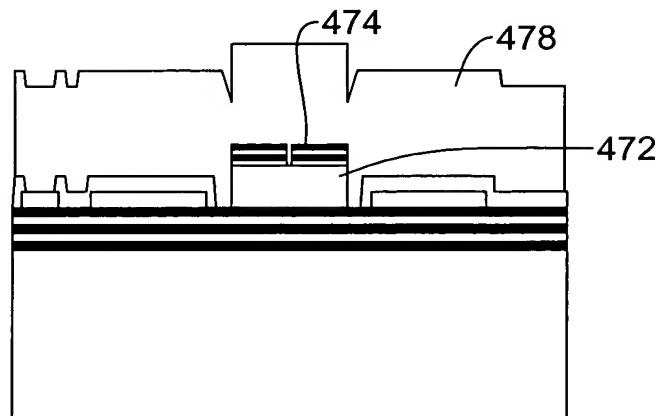


Figure 14E

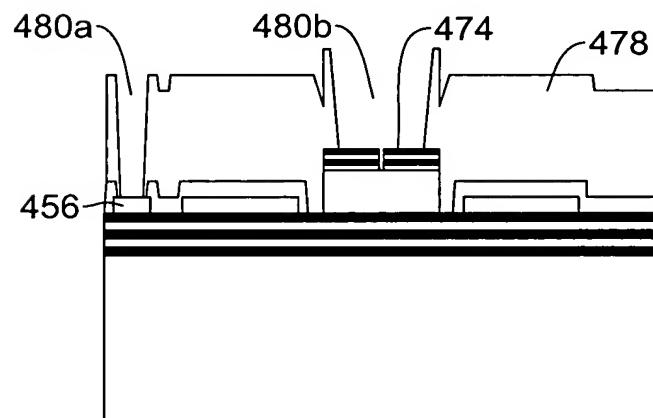


Figure 14F

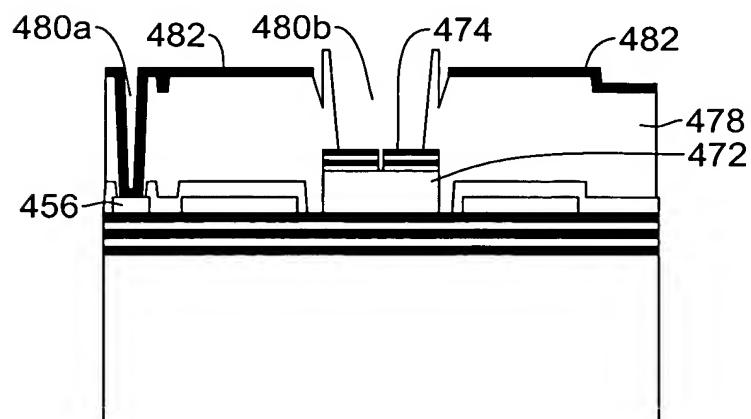


Figure 14G

22/39

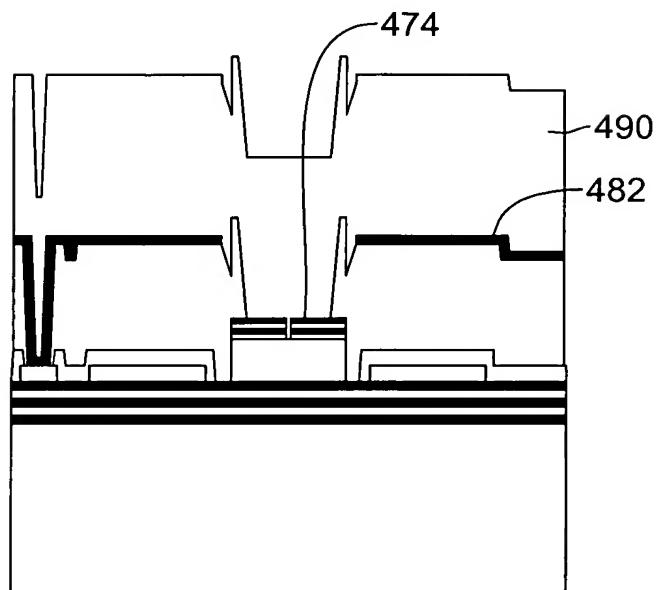


Figure 14H

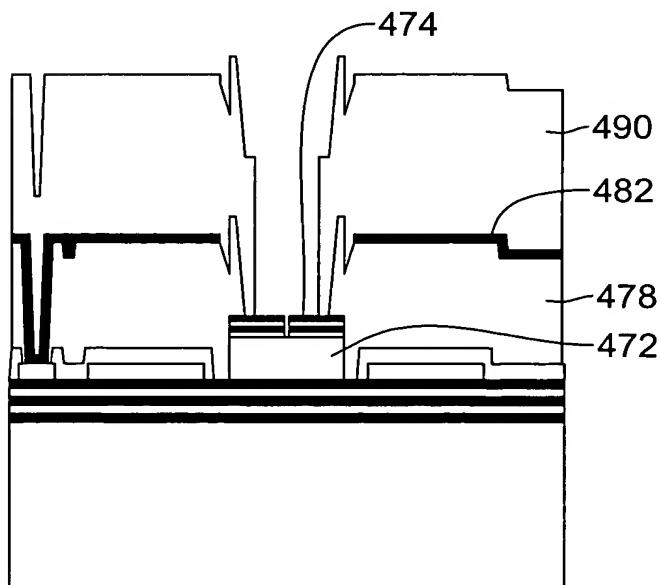


Figure 14I

23/39

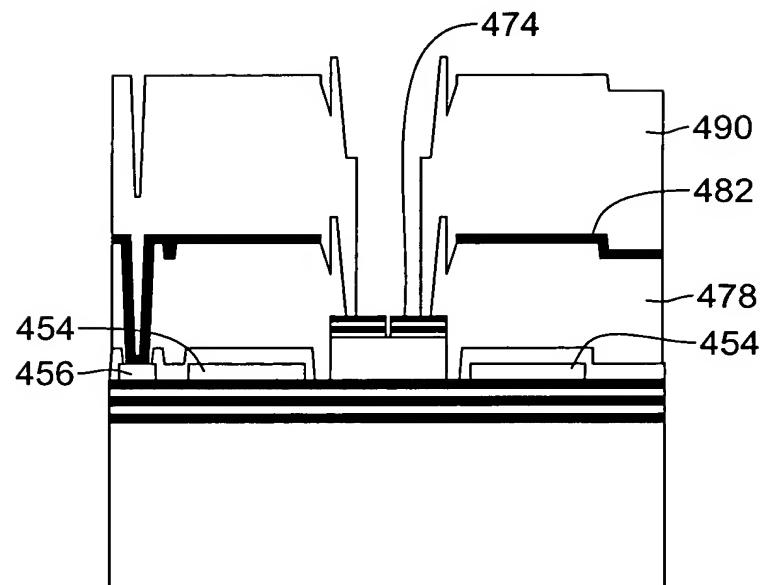


Figure 14J

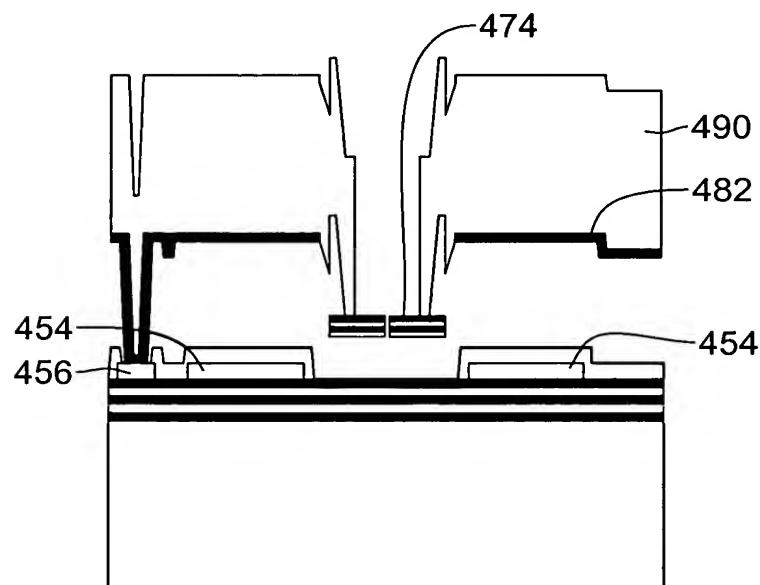


Figure 14K

24/39

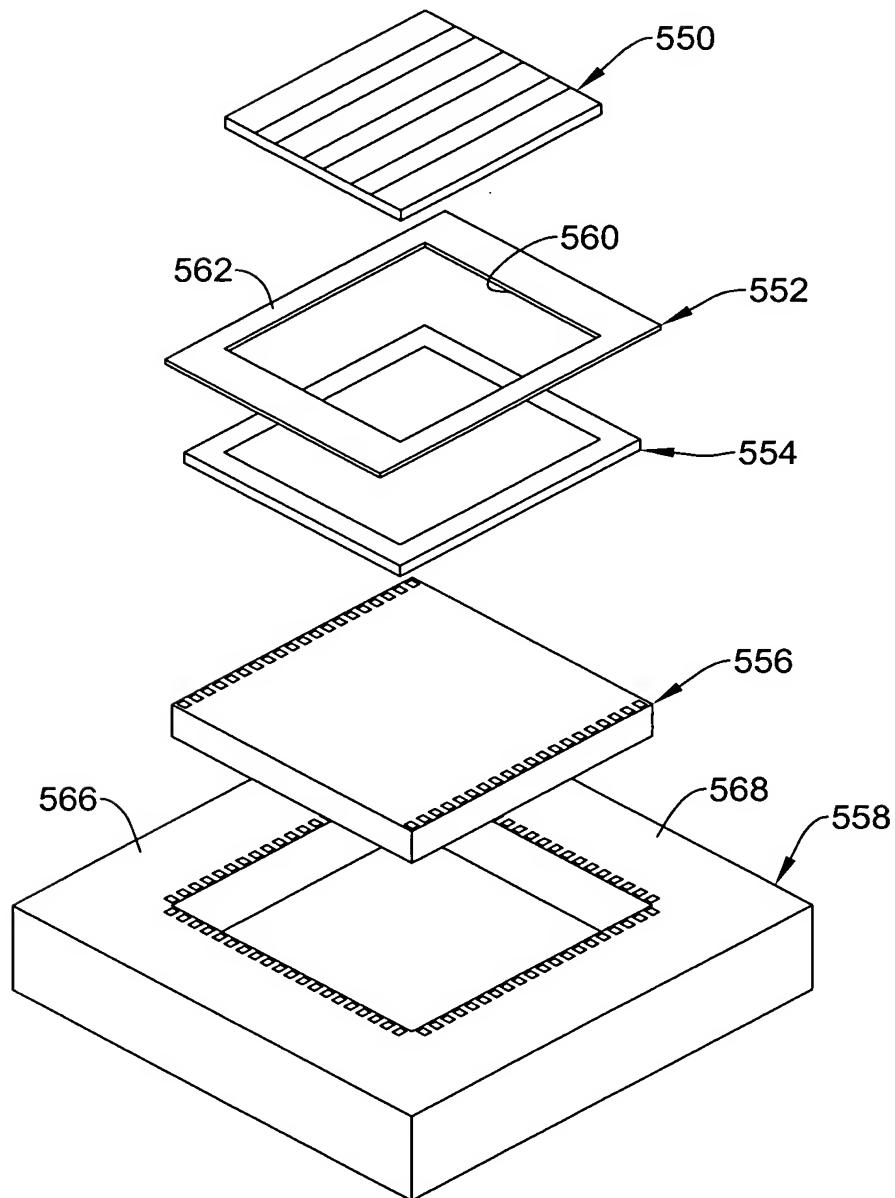


Figure 15A

25/39

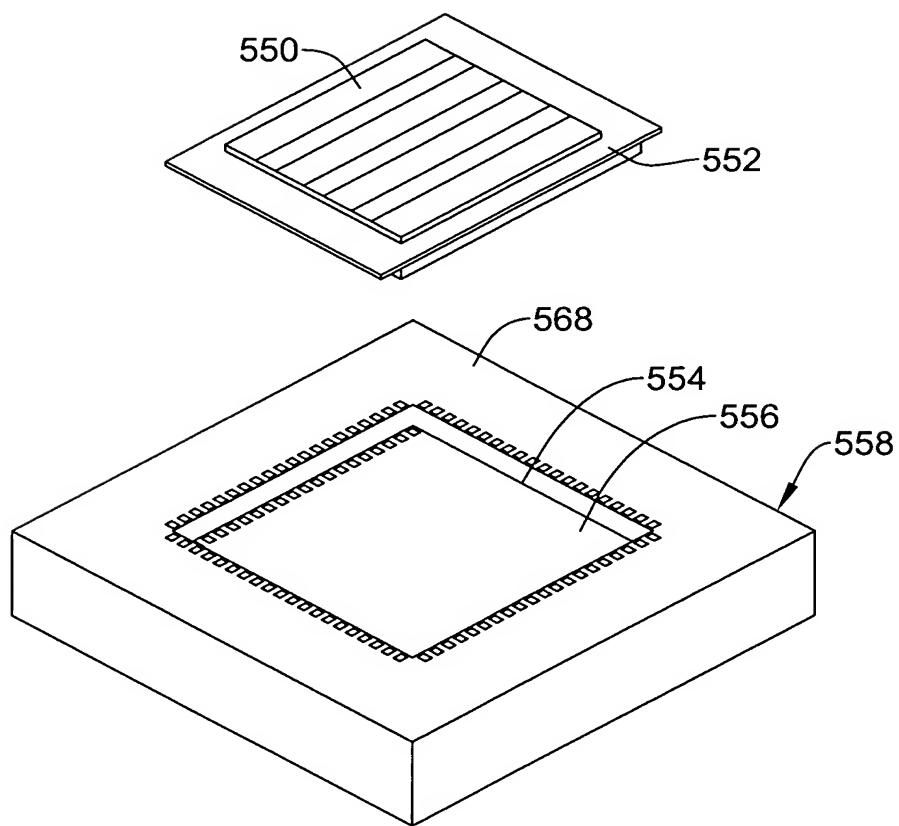


Figure 15B

26/39

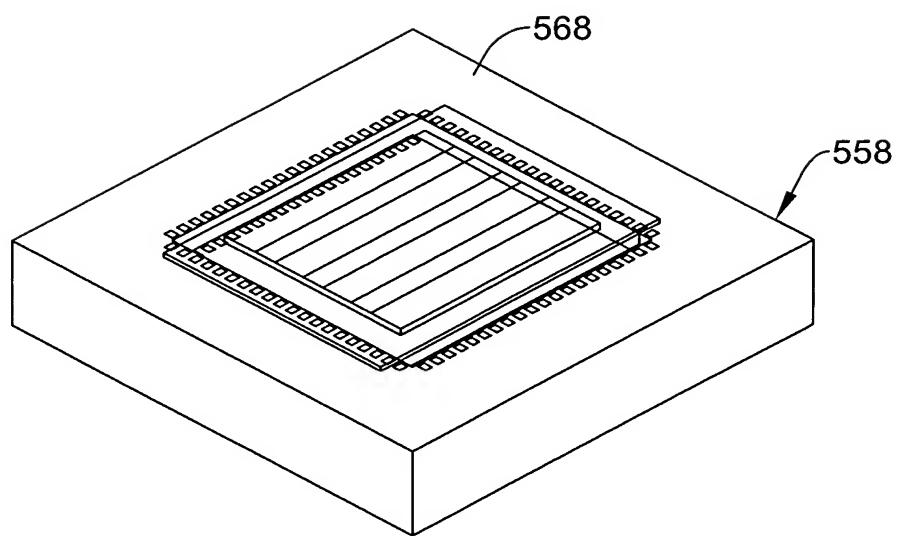


Figure 15C

27/39

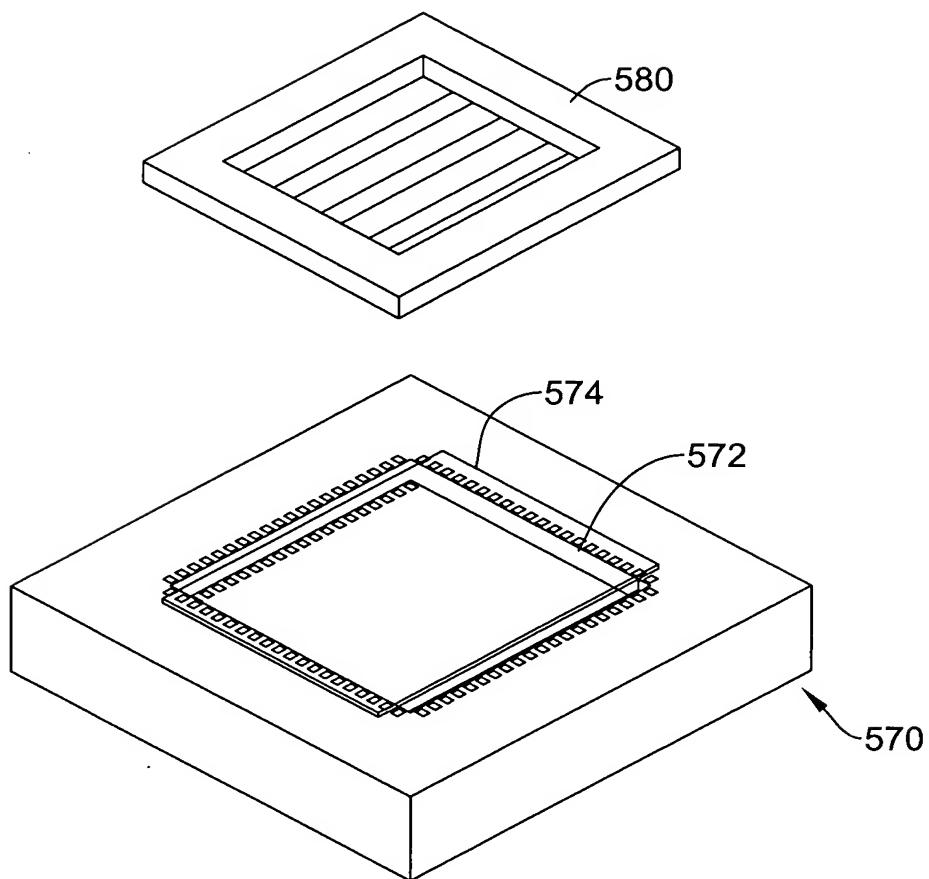


Figure 16

28/39

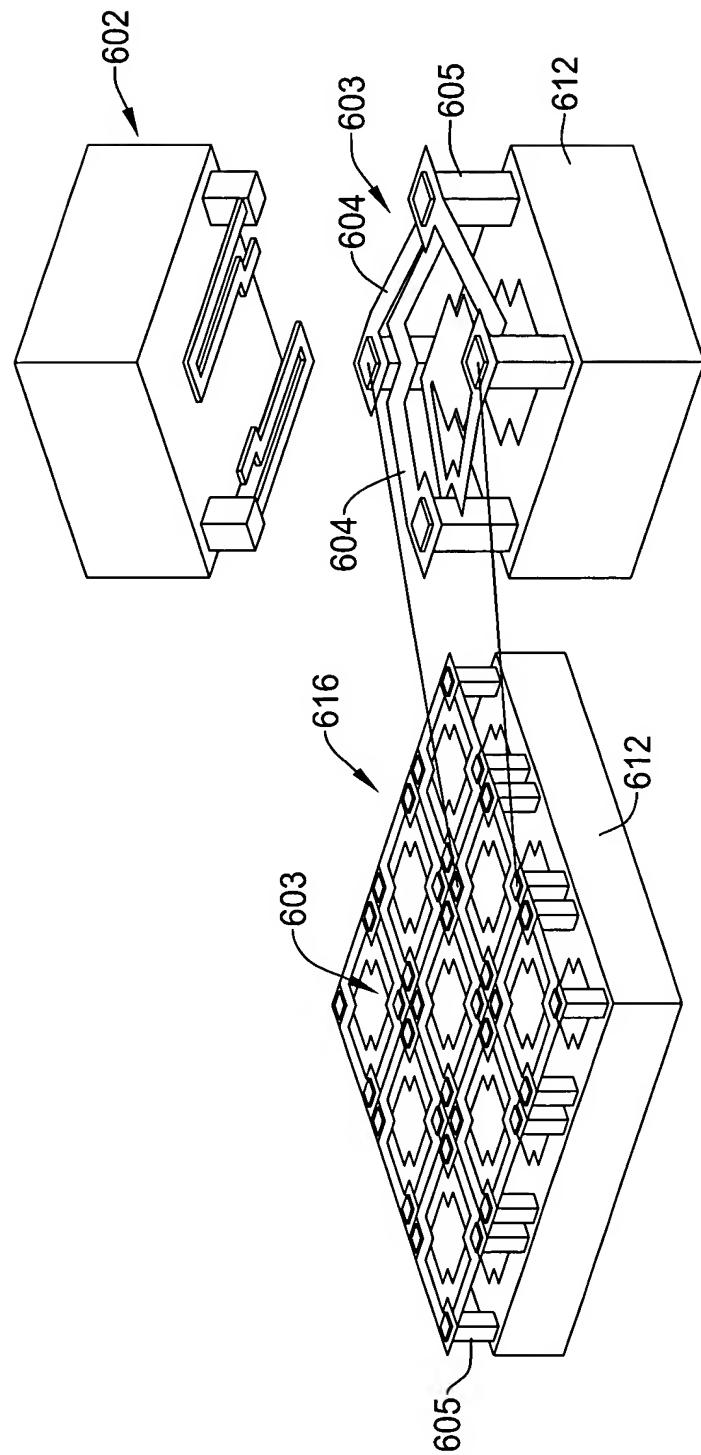
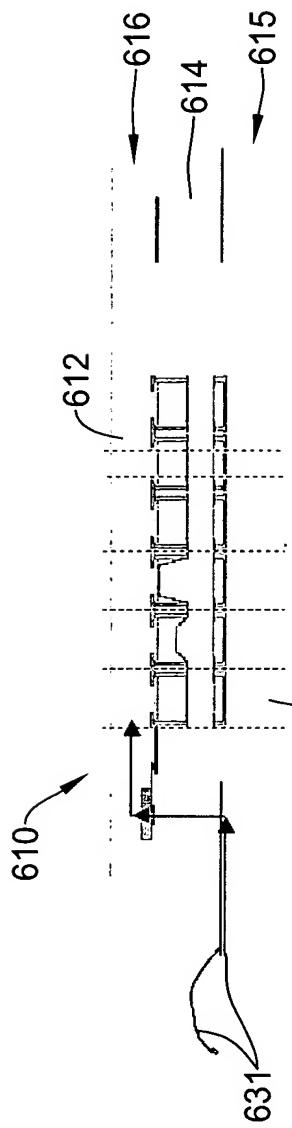


Figure 17



611 / Figure 18

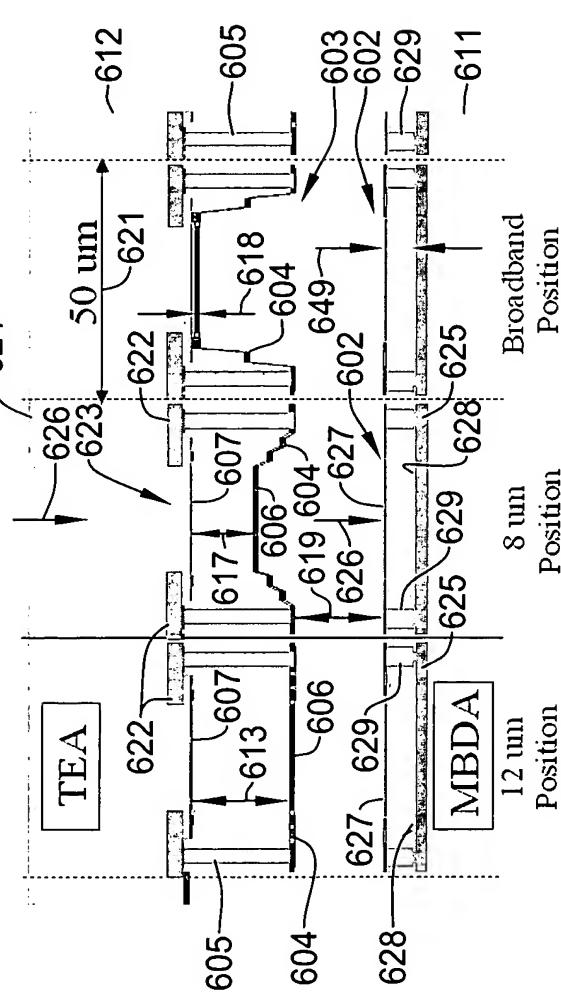


Figure 19

30/39

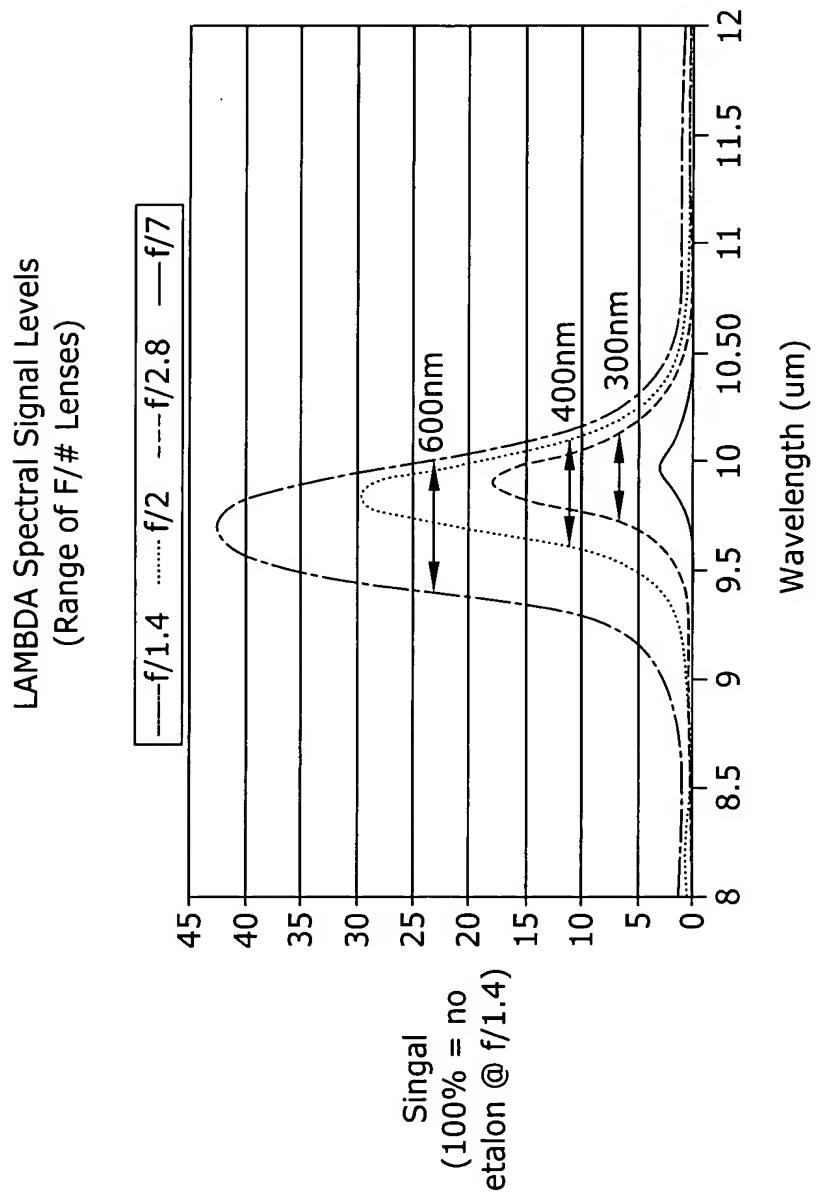


Figure 20

31/39

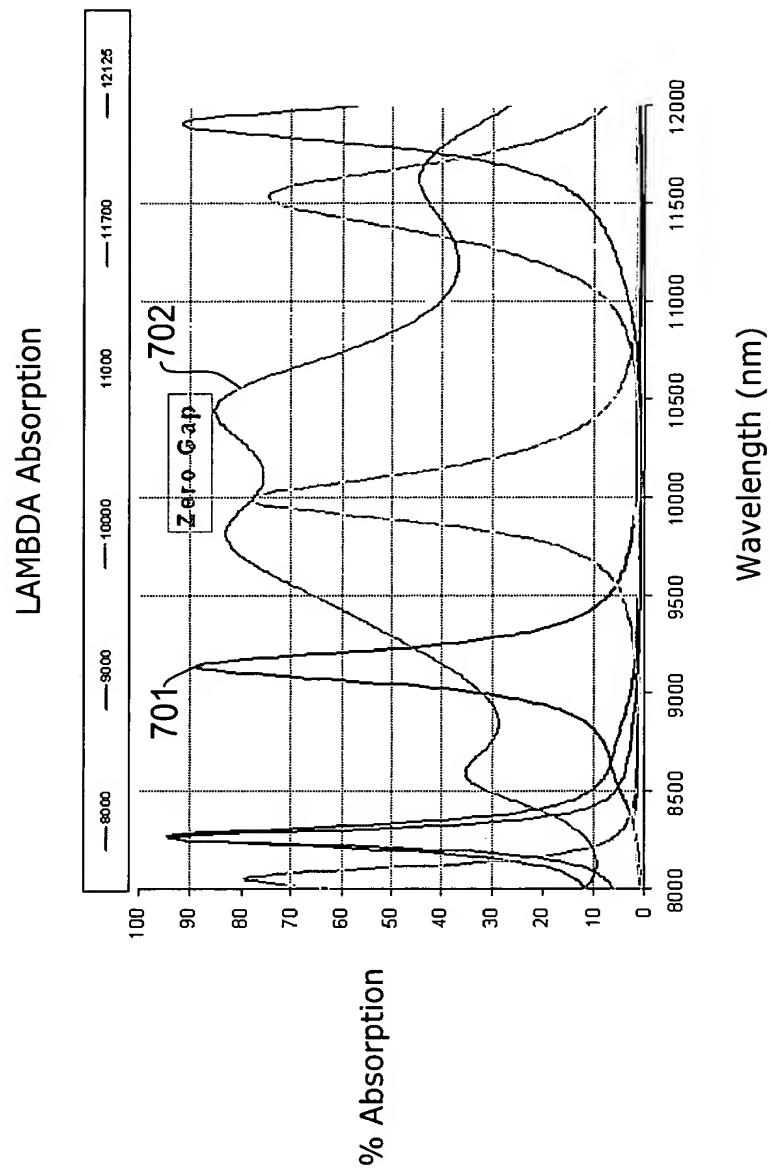


Figure 21

32/39

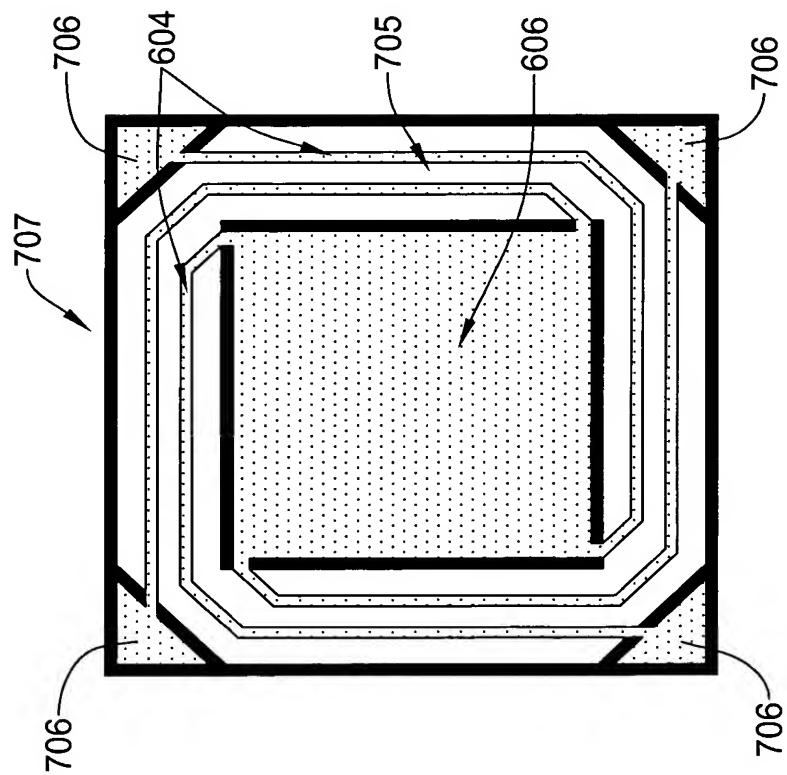


Figure 22

33/39

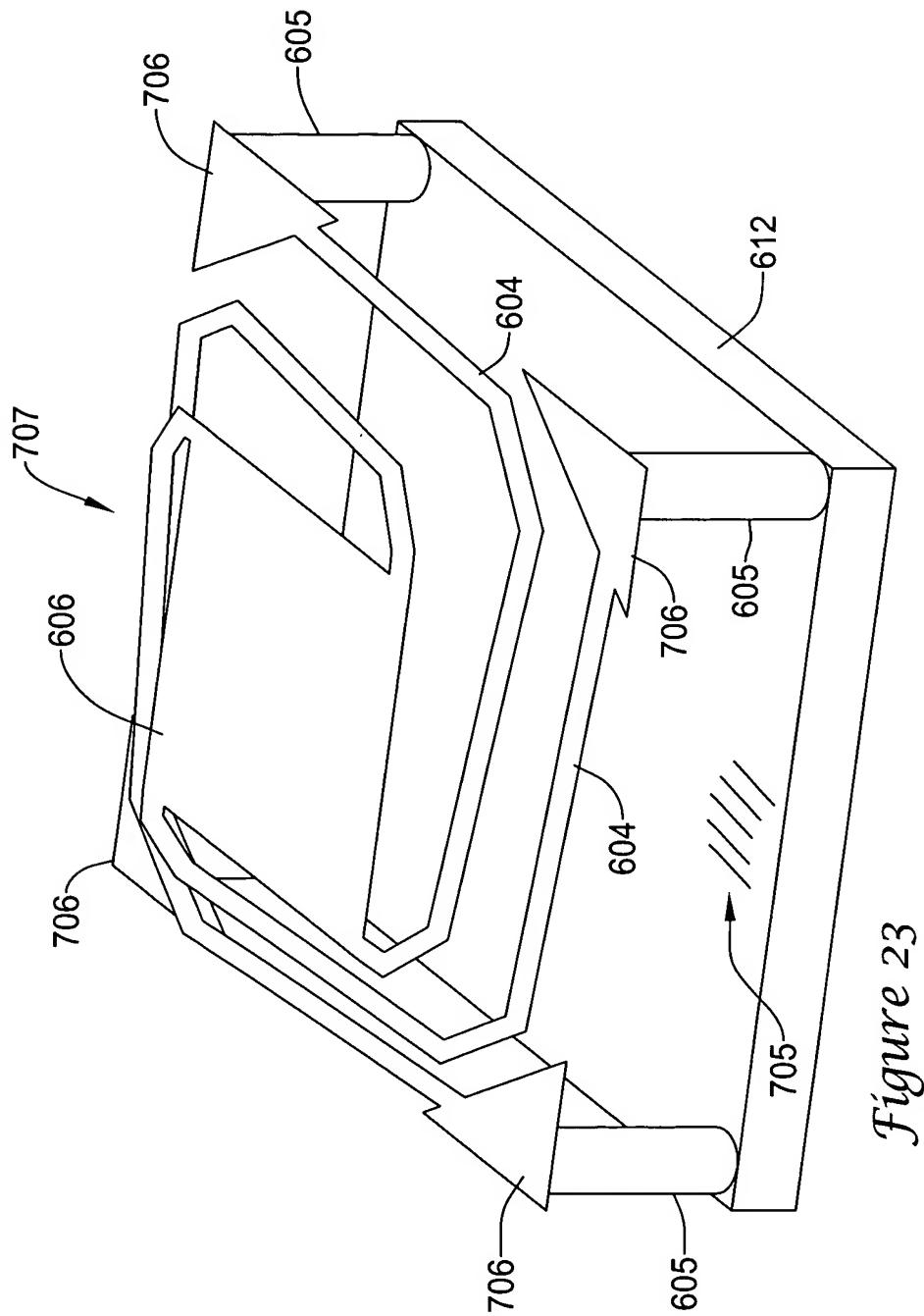


Figure 23

34/39

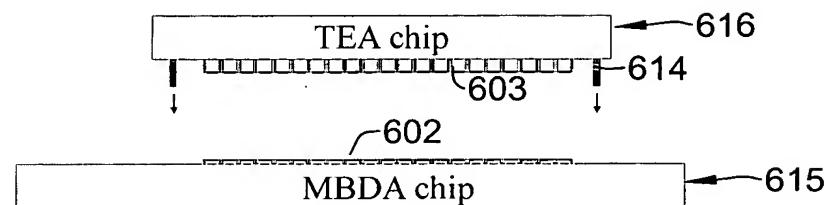


Figure 24A

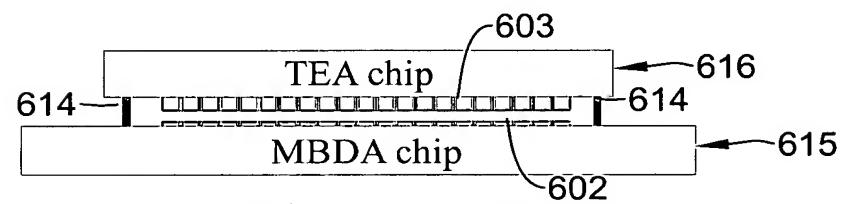


Figure 24B

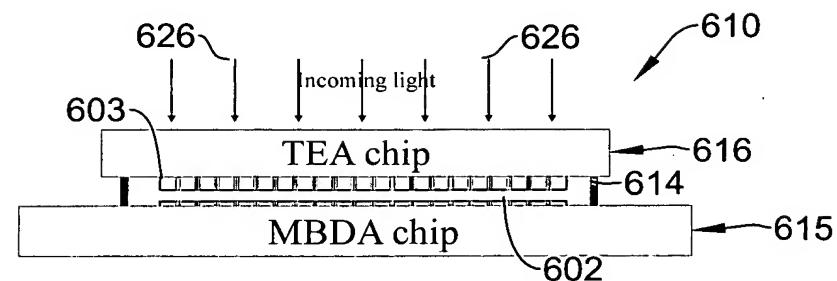
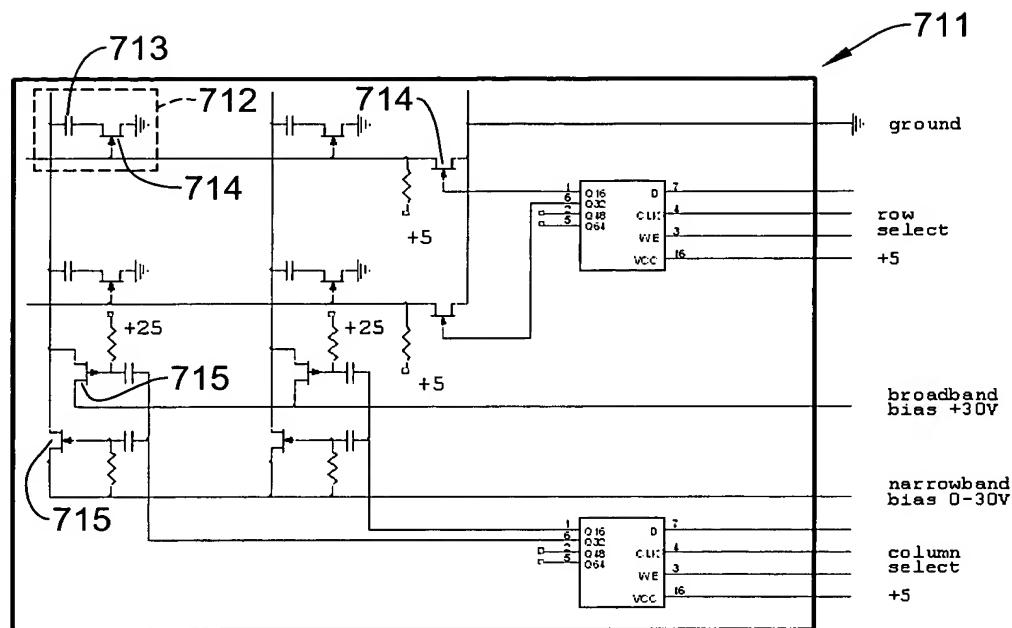
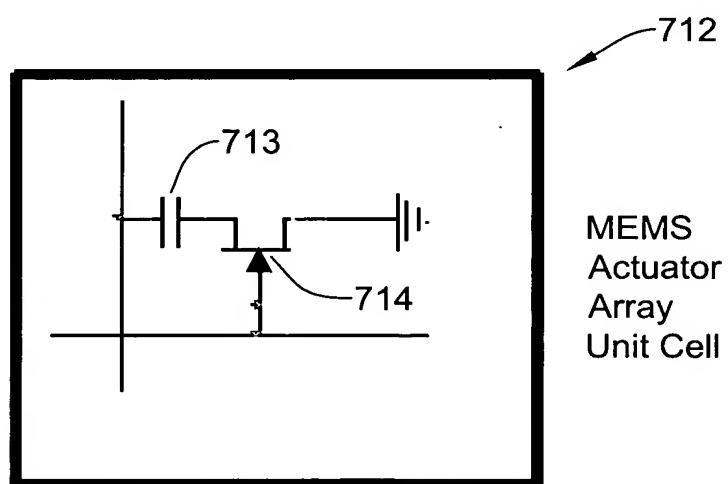


Figure 24C

35/39



MEMS
Actuator
Array



MEMS
Actuator
Array
Unit Cell

Figure 25B

36/39

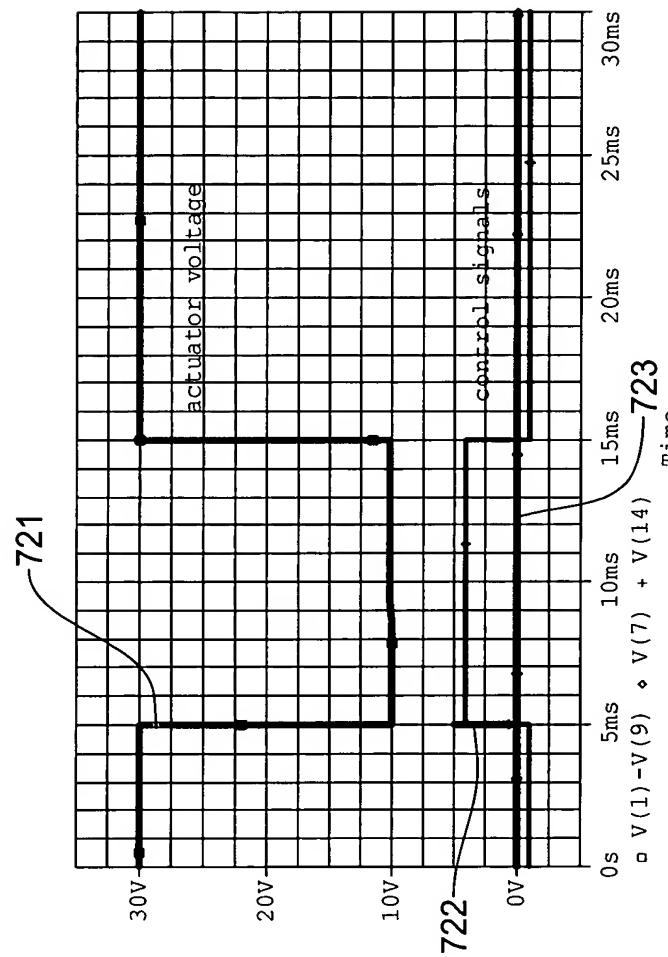


Figure 26

37/39

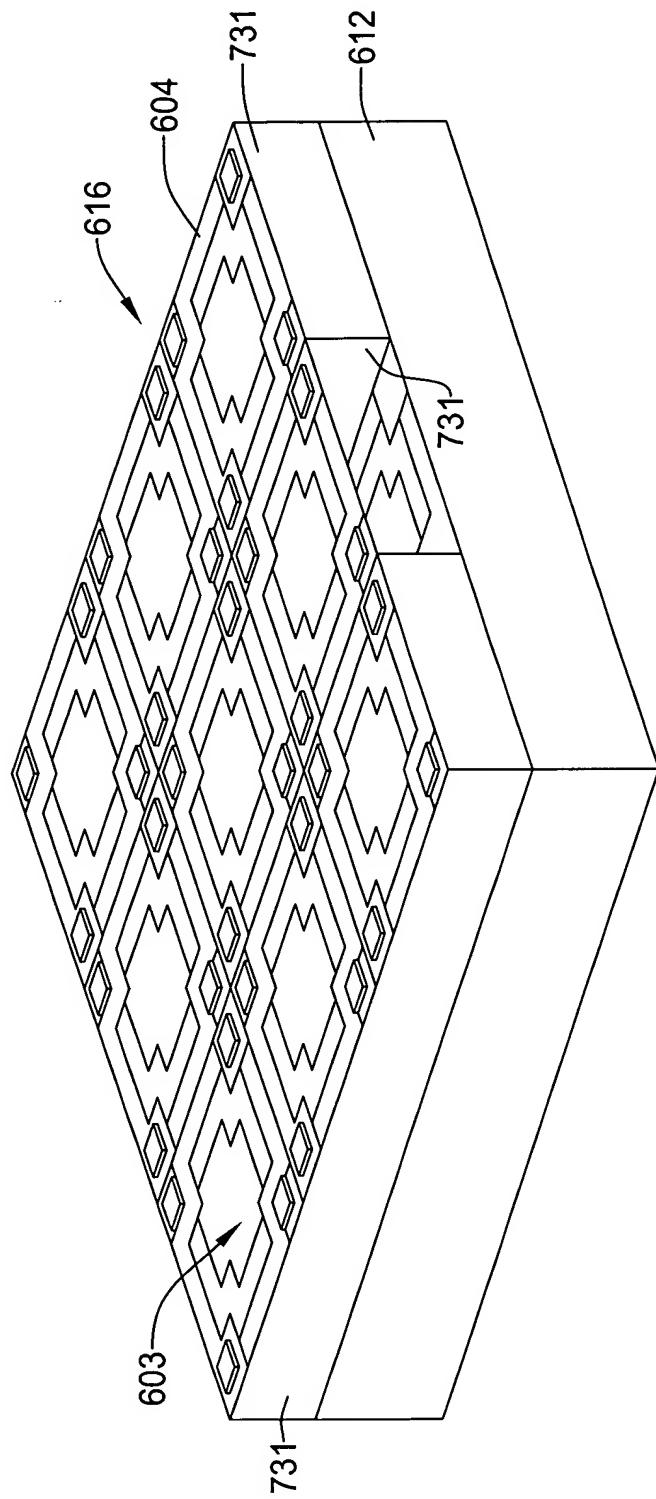


Figure 27

38/39

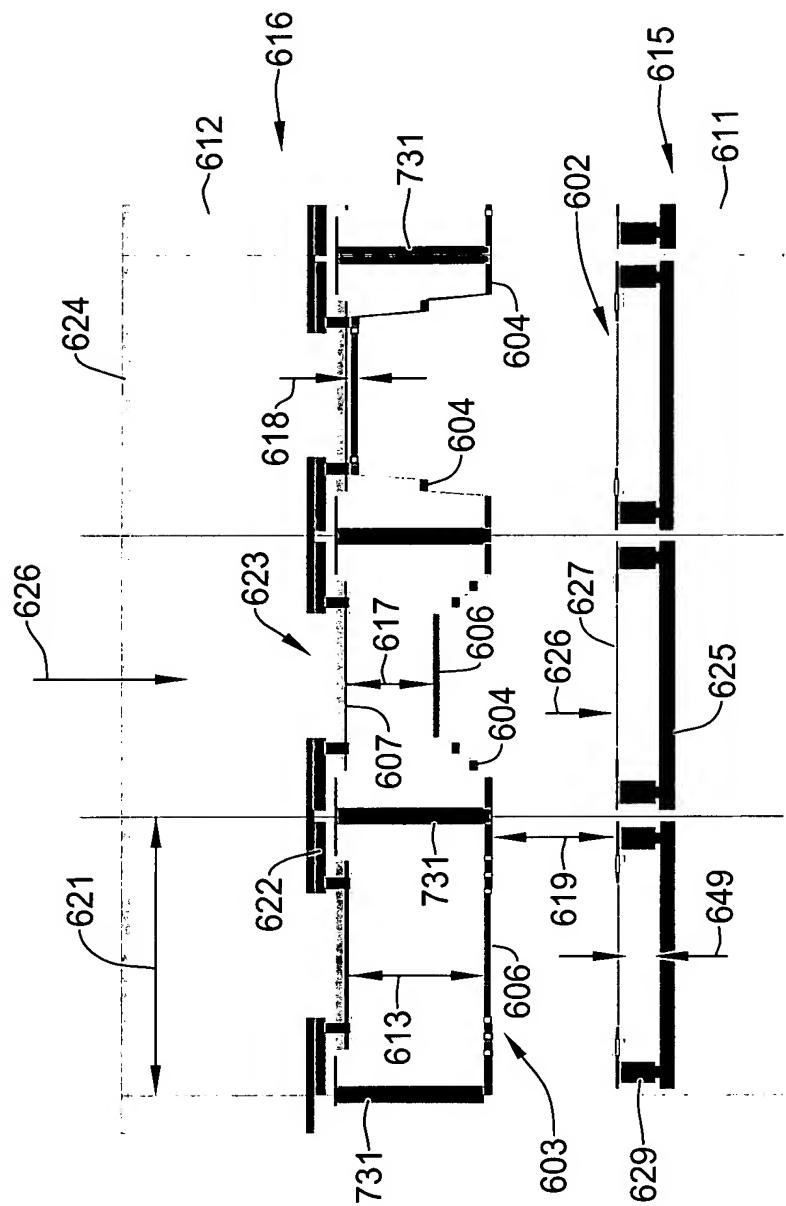


Figure 28

39/39

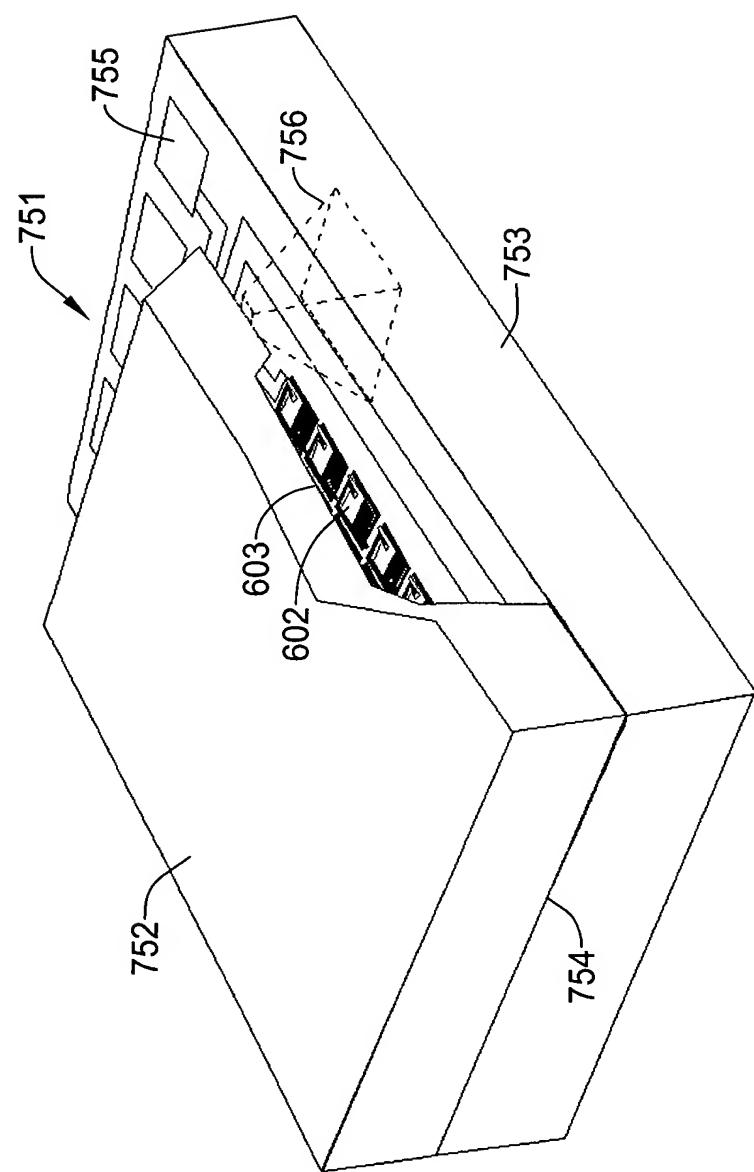


Figure 29